

PATENT COOPERATION TREATY

PCT
NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 72.2)

From the INTERNATIONAL BUREAU

To:

TS Eingang

10. Juni 2002

ZF FRIEDRICHSHAFEN AG
 88038 Friedrichshafen
 ALLEMAGNE

RECEIVED
 SEP 25 2002
GROUP 3600

Date of mailing (day/month/year) 06 June 2002 (06.06.02)	
Applicant's or agent's file reference 7610 WO Z RSF-RU	IMPORTANT NOTIFICATION
International application No. PCT/EP00/09990	International filing date (day/month/year) 11 October 2000 (11.10.00)
Applicant ZF FRIEDRICHSHAFEN AG et al	

1. Transmittal of the translation to the applicant.

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

2. Transmittal of the copy of the translation to the elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

JP,US

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

EP

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer Christelle CROCI Telephone No. (41-22) 338.83.38
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Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 7610 WO Z RSF-HA	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP00/09990	International filing date (<i>day/month/year</i>) 11 October 2000 (11.10.00)	Priority date (<i>day/month/year</i>) 16 October 1999 (16.10.99)
International Patent Classification (IPC) or national classification and IPC F16H 37/02		
Applicant ZF FRIEDRICHSHAFEN AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet. <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application

Date of submission of the demand 10 April 2001 (10.04.01)	Date of completion of this report 17 September 2001 (17.09.2001)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP00/09990

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages _____ 1-11 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____ 1-12 _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the drawings:
pages _____ 1/3-3/3 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/EP 00/09990

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-12	YES
	Claims		NO
Inventive step (IS)	Claims	1-12	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

2. Citations and explanations

1. Novelty

Claims 1 to 12 satisfy the requirements of PCT Article 33(2) because its subject matter is novel.

- 1.1 The following features of Claim 1 are known from **EP-A-787 927 (D1)** (see Figures 1, 3 and column 3, line 16 to column 4, line 25) and **EP-A-199 533 (D2)** (see Figures 1, 2 and column 6, lines 34-56); both publications can be seen as the closest prior art. They show a:

"continuously adjustable motor vehicle transmission with a variator (D1: 1; D2: 36), for continuous transmission adjustment and a multi-step gear shift (D1: 29; D2: 14) with at least one input (D1: 17; D2: 68) and one output shaft (D1: 18; D2: 66) and at least two forward gears and with at least one reverse gear".

The subject matter of Claim 1 differs from the transmission in D1 and D2 in the features of its characterizing part, namely, in that

"in the multistage gear box, a reversal of

rotational direction occurs between the input and the output shaft by means of the at least two forward gears, and the at least one reverse gear is designed without reversal of rotational direction between the input and the output shaft".

In both publications D1 and D2, the input and the output shaft rotate without reversal of rotational direction in the two forward gears.

Hence, the subject matter of Claim 1 is novel.

1.2 The subject matter of Claims 2-12 is similarly novel because said claims are dependent on Claim 1.

2. Inventive step

Claims 1-12 satisfy the requirements of PCT Article 33(3) because their subject matter involves an inventive step.

2.1 The above-mentioned characterizing features of Claim 1 (see Item 1.1) effect that the usual doubled spur gear step (see D1, Figure 1, reference 16) between the gear box and the axle differential connected on the output side is reduced to a simple spur gear step. This simplifies the transmission and requires less effort to construct. The problem addressed by the invention could be seen as that of simplifying the known transmission.

Although the claimed solution may appear trivial in itself, in combination with the transmission of the preamble and in view of the problem posed, it does not appear obvious to a person skilled in the art.

None of the publications cited discloses the claimed solution.

The subject matter of Claim 1 is thus considered to involve an inventive step.

2.2 The subject matter of Claims 2-12 also involves an inventive step because these claims depend on Claim 1.

3. Industrial applicability
Claims 1-12 satisfy the requirements of PCT Article 33(4) because their subject matter is industrially applicable. They relate to a transmission for motor vehicles that is definitely industrially applicable.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Contrary to PCT Rule 5.1(a)(ii), the description does not cite documents D1 and D2 or indicate the relevant prior art disclosed therein.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 2 does not satisfy the requirements of PCT Article 6 because it is not clear.

In line 21, the word "in particular" makes the definition of the variator unclear. Omitting this word would remedy the defect.